

METHOD AND ARTICLE FOR PRODUCING HYDROGEN GAS

ABSTRACT OF DISCLOSURE

[0044] Disclosed herein is a method comprising combusting a feed stream to form combustion products; and reforming the combustion products to produce a gaseous composition comprising hydrogen. Disclosed herein too is a method for producing hydrogen comprising introducing a feed stream comprising natural gas and air or oxygen into a cyclical compression chamber; compressing the feed stream in the cyclical compression chamber; combusting the feed stream in the cyclical compression chamber to produce combustion products; discharging the combustion products from the cyclical compression chamber into a reforming section; and reforming the combustion products with steam in the reforming section to produce a gaseous composition comprising hydrogen.